AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

- 1. (Canceled)
- 2. (Currently Amended) The method as set forth in claim 47, wherein the artifacts attributable to the array lens are induced during image scan using the array lens, resulting in an electronic image representation including the artifacts, the method further comprising:

applying the compensation parameters to the electronic image representation including the artifacts, resulting in a post-compensated electronic image representation.

3. (Currently Amended) The method as set forth in claim 47, wherein the artifacts attributable to the array lens are induced during image output using the array lens, the method further comprising:

applying the compensation parameters to an electronic image representation without the artifacts, resulting in a pre-compensated electronic image representation.

4. (Currently Amended) The method as set forth in claim 47, wherein the obtaining a characterization step comprises:

measuring optical performance of the array lens at a plurality of locations across the array lens.

5. (Currently Amended) The method as set forth in claim 47, wherein the obtaining a characterization step comprises:

estimating optical performance of the array lens at a plurality of locations across the array lens.

6. (Currently Amended) The method as set forth in claim 47, wherein the obtaining a characterization step comprises:

measuring optical performance of the array lens at at least one location on the array lens; and

estimating optical performance of other locations on the array lens based on the measurements.

7. (Previously Presented) A method of altering an image representation to adjust for artifacts attributable to an array lens, the method comprising:

obtaining a characterization at selected locations across the array lens; from the characterization, determining compensation parameters for a plurality of locations across the array lens;

storing the determined compensation parameters; and

applying the compensation parameters to the image representation with an iterative restoration method selected from the set of ML-EM method, sharpening filters, windowed-wiener spectrum technique and spatial convolution.

8. (Currently Amended) An imaging apparatus comprising: at least one light source;

an array lens, facing in a direction of the light source, which focuses emitted light from the light source onto a desired receptor, said array lens including a plurality of neighboring lens elements disposed with respect to one another transverse to the direction in which the array lens faces, the array lens inducing artifacts in an image representation on the receptor;

a memory which stores a plurality of parameters to compensate for the array lens induced artifacts; and

a processor which applies the compensation parameters, resulting in a compensated image representation, said processor applying the compensation parameters to the image representation with an iterative restoration method selected from the set of ML-EM method, sharpening filters, windowed-wiener spectrum technique and spatial convolution.

9. (Original) The imaging apparatus as set forth in claim 8, wherein:
the imaging apparatus employs the array lens to acquire an image
representation from a physical image, thereby inducing artifacts in the image
representation, and

the processor applies the compensation parameters to the image representation including the artifacts, resulting in a post-compensated image representation.

10. (Original) The imaging apparatus as set forth in claim 8, wherein:
the imaging apparatus employs the array lens to produce a physical image from a desired image representation, and

the processor applies the compensation parameters to the desired image representation, resulting in a pre-compensated image representation.

- 11. (Original) The imaging apparatus as set forth in claim 8, wherein the array lens comprises a plurality of adjacent rods arranged in a one-dimensional array.
- 12. (Original) The imaging apparatus as set forth in claim 8, wherein the array lens comprises a plurality of adjacent rods arranged in a two-dimensional array.
 - 13. (Canceled)
 - 14. (Canceled)
 - 15. (Canceled)
 - 16. (Canceled)
 - 17. (Canceled)
 - 18. (Canceled)